

Customers' Perceived Risk and Trust in Using Mobile Money Services—an Empirical Study of Ghana

Ibn Kailan Abdul-Hamid, University of Professional Studies, Accra, Ghana

Aijaz A. Shaikh, University of Jyväskylä, Jyväskylä, Finland

Henry Boateng, University of Technology Sydney, Ultimo, Australia

Robert E. Hinson, University of Ghana and University of the Free State Business School, Accra, Ghana

ABSTRACT

Although mobile money (MM) has been explored in the existing literature, the roles of trust and risk in MM use have received little attention from researchers. Furthermore, many of the existing studies have treated these constructs as unidimensional. The extant literature also shows that perceived risk has received little attention from researchers who have conducted studies on MM. Thus, the objective of this study is to examine the roles of trust and perceived risk in customers' intent to adopt MM services in Ghana. Both trust and perceived risk were broken down into various dimensions. The study involved 671 respondents who were selected via an intercept approach and an online survey. Structural equation modelling was used to test the study's hypotheses. The findings show that perceived risk is negatively associated with customers' intent to use MM services and economy-based trust. Trust in service providers and economy-based trust are positively associated with customers' intent to use MM services. The implications of the findings are provided in the latter part of this study.

KEYWORDS

Ghana, Mobile Money, Mobile Networks, Mobile Payments, Perceived Risk, Trust

INTRODUCTION

Mobile money (MM), also referred to as branchless banking, is a banking and payment tool that uses portable devices to allow individuals to access and complete financial transactions, such as funds transfers and payment of utility bills. In light of the exponential growth of cell phone coverage and usage (Gichuki & Mulu-Mutuku, 2018), MM services are seen as a likely solution to financial exclusion on the African continent (Tchouassi, 2012), including in Ghana. Increasing cell phone diffusion in Ghana has led to a remarkable growth in the adoption and usage of MM services. For example, in 2015, there were 13.1 million users of MM services; by 2017, this figure had jumped to 23.95 million—a growth rate of more than 83% in two years (www.bog.gov.gh). However, while this increase in the usage of MM services looks promising, the total population in Ghana accessing and using the MM services now stands at about 50%. The remaining 50% of the Ghanaian population is still outside the MM services net; therefore, the industry, regulators and academics need to determine

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how to increase MM usage and financial inclusion for the remotely located and previously unbanked segment of the population.

Online transactions are associated with customer concerns about consumer trust and perceptions of risk linked to remotely executed payment services such as MM (PWC, 2016). Prior researchers (e.g., Yang et al., 2015; Ratnasingam et al., 2005) have considered the factors ‘trust’ and ‘risk’ as central to the adoption and use of electronic payment systems and electronic commerce. Some researchers (e.g., Im et al., 2008) have also noted that the technology adoption and usage literature has often neglected the role of perceived risk in technology use, and there is a need to further investigate this issue in relation to MM use. The few existing studies in Ghana treated trust and risk as unidimensional constructs (see for example Tobbin & Kuwornu, 2011), but the existing literature (e.g., Ball et al., 2016) argued that, trust and risk should be considered as multidimensional constructs. Moreover, the association between risk and trust issues and MM service use intent in Ghana has rarely been examined. Against this backdrop, this study first contributes to the existing literature on MM use intent in a developing country context by treating trust and risk as multidimensional constructs. Second, it examines how perceived risk influences the consumer’s intent to use MM services. Third, it explores economy-based trust and intent to use the MM service nexus. Fourth, it examines trust in the MM service provider and intent to engage in a MM service relationship.

The rest of the paper is organized as follows. After a review of the theoretical background and existing literature, the research model and study hypotheses are elaborated, followed by an account of sampling design, measures, descriptive statistics, model measurement and structural equation modelling. The paper concludes with implications, limitations and directions for future research.

THEORETICAL BACKGROUND AND LITERATURE REVIEW

MM Services

MM involves the use of mobile phones to access financial services remotely that have typically been provided over a counter (Mothobi & Grzybowski, 2017). MM services largely include transfers and payments. MM is also referred to as cell phone banking, over-the-counter banking, agent banking and branchless banking (Diniz et al., 2012).

The weaknesses of traditional and other electronic banking channels (ATMs and online banking) in fulfilling customers’ financial needs and requirements due to limited availability, weak internet connectivity and other access issues may be the reason for the increasing popularity of MM services.

MM services are a novel way of accessing and conducting low-cost financial transactions. Unlike other digital banking channels, MM services operate at the intersection of finance and telecom and involve a diverse set of stakeholders with competing players from various fields (Donovan, 2012). Among these stakeholders or actors, MM agents (individuals or firms who operate mobile money services) are at the frontline of MM service deployment and play a decisive role in the success of MM services in Ghana and elsewhere.

Trust and Risk in Digital Services

It is widely believed (e.g., Safeena et al., 2018) that ‘trust’ and ‘risk’ occupy significant positions in e-business services (including e-commerce). This is perhaps because of the uncertainty and risk involved in online transactions conducted remotely using portable devices, which are prone to hacking, loss and misuse (Shaikh et al., 2018). Trust reflects a willingness to be vulnerable based on the positive expectation of another party’s future behaviour (Kim et al., 2018). With regard to MM services in a developing country, trust refers to the consumer’s belief that MM services will be cost- and time-effective and that service providers will safeguard their clients’ money and information. As a third-party provider, such as an agent, normally delivers MM services, the role of trust in consumer intent to use MM services relates directly to the customer’s trust in that agent.

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